

# Notice of Allowability

Application No.

09/710,948

Examiner

Kuo-Liang J Tang

Applicant(s)

KRISHNA ET AL.

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed 6/21/2004.
2. ☒ The allowed claim(s) is/are 1-5, 7-18, 20-31 and 33-39.
3. ☒ The drawings filed on 11/13/2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

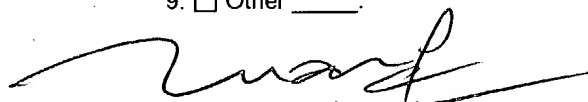
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TUAN DAM  
SUPERVISORY PATENT EXAMINER

**DETAILED ACTION**

***Response to Appeal Brief***

1. This action is responsive to the Appeal Brief filed June 21, 2004.
2. Applicant's argument, see Remarks/Arguments, page 5-11, filed June 21, 2004, with respect to claims 1-5, 7-18, 20-31 and 33-39 have been fully considered and are persuasive. The rejection of claims 1-5, 7-18, 20-31 and 33-39 has been withdrawn.

***Examiner's Statement of Reason(s) for Allowance***

3. Claims 1-5, 7-18, 20-31 and 33-39 are allowed.

The following is an examiner's statement of reasons for allowance:

The examiner agrees with Applicants as point out on page 10 of the Appeal Brief that the prior of record, i.e., "How Debuggers Work: algorithm, data structure, and architecture" to Rosenberg et al. ("Rosenberg"), and US Patent No. 5,881,288 to Sumi et al. ("Sumi"), when taken individually or in combination, fails to teach the following limitation taken in combination with the remaining limitations of the independent claims (1, 14 and 27):

"... first operating system module ... second operating system module ... to a second operating system module ... from the second operating system module ... used by the operating system for uniquely identifying the executable file ..."

Which is to say that use *of operating system modules to determine actual memory locations for instruction of an executable image loaded in a target computer system and inserting these location in the executable image.*

Taken in the context of the present invention, the executable image can be debugged using operating system modules of a computer system that are the same modules available in the target computer system. That is, the modules are not special modules of debugger software. Also, the arrangement allows identifying a breakpoint without additional debug information at run time and without making any assumptions about load location or process contexts of executable code being debugged.

Rosenberg, instead, only teaches method for identifying a break point setting involving specifying a file name and line number or file offset in a source file. Rosenberg does not teach in an executable as in the subject of the present application. Sumi teaches setting a breakpoint in the executable file. Both Rosenberg and Sumi do not teach use of operating system modules to determine actual memory locations for instruction of an executable image loaded in a target computer system and inserting these location in the executable image.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is 703-305-4866. The examiner can normally be reached on 8:30AM - 5:00PM.

Art Unit: 2122


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 703-305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

After October 25, 2004, examiner can be reached at new telephone number (571) 272-3705, and the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Kuo-Lung J. Tang*

Software Engineer Patent Examiner

  
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SUPERVISORY PATENT EXAMINER